

Date: Friday, 11/17/2006 9:07:58 AM  
User: Kim Johnston

## Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: SADDLE FITTING, AFT (OUTBOARD/INBOARD)
Job Number	: 29512	Part Number	: D2573
Estimate Number	: 10533	Drawing Number	: D2573 REV E
P.O. Number	: <u>N/A</u>	Project Number	: N/A
This Issue	: 11/17/2006 S.O. No. : <u>N/A</u>	Drawing Revision	: E
Prsht Rev.	: NC	Material	: <u>N/A</u>
First Issue	: <u>N/A</u> Type : MACHINED PARTS	Due Date	: 12/5/2006
Previous Run	: 29161	Qty:	16 Um: Each
Written By	: <u>JA 061117</u>		
Checked & Approved By	: <u>JA 061117</u>		
Comment	: Est: I As Per RevE 06-01-27 JLM		

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	D6101007	7075-T7351 8.25X7.75X2.5
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Comment: Qty.: 1.0000 Each(s)/Unit Total: 16.0000 Each(s)

7075-T7351 8.25X7.75X2.5

Make from D6101-007 billet for D2573

Ensure that grain is along 7.75" length

Batch No: 325353 x 16

SD/gml 06/12/08 16

2.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
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Comment: HAAS CNC VERTICAL MACHINING #1

Program Batch No. SD Double check by: JG 06/12/03

1-Machine Step No 1 per Folio FA051 and inspect per attached Dimension Sheets 2-Machine Step No 2 per

Folio FA051 and inspect per attached Dimension Sheets

3-Machine Step No 3 per Folio FA051 and inspect per attached Dimension Sheets

4-Deburr and remove all machining marks

5-Tumble to remove sharp edges.

SD/gml 06/12/10 16

3.0	MILLING CONV.	CONVENTIONAL MILLING MACHINE
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Comment: CONVENTIONAL MILLING MACHINE

Machine keyway as per dwg D2573 & D2574

gml 06/12/10 16

4.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
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Comment: INSPECT PARTS AS THEY COME OFF MACHINE

SD/gml 06/12/10 16

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes ☒ No ☐ DQA: ☒ ☐ Date: 06/12/17

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Friday, 11/17/2006 9:07:59 AM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SADDLE FITTING, AFT (OUTBOARD/INBOARD)

Job Number: 29512

Part Number: D2573

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

QC8

SECOND CHECK



Comment: SECOND CHECK

En 06/12/15 x 16

6.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Acid etch and Alodine as per QSI 005 4.1

A.M

06/12/18

(X/16)

7.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

M-A/40

06/12/18

(16x)

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT

06/12/18 (16)

9.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: 57478

06/12/18 (16)

10.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

06/12/18

Job Completion



C Loc 112119

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

<b>DART AEROSPACE LTD</b>	<b>Work Order:</b>	<b>29512</b>
<b>Description:</b> Saddle, Aft Outboard	<b>Part Number:</b>	<b>D2573</b>
<b>Inspection Dwg:</b> D2573 Rev. E		<b>Page 1 of 1</b>

Inspect dimensions highlighted on inspection sheet drawing D2573 Rev. E and record below:

				Recorded Actual Dimensions				By	Date
Dim	Min	Max	Go/No Go Gauge	1	2	3	4		
A	0.438	0.443	DT8682	0.435	0.439	0.440	0.440		
B	1.745	1.755		1.750	1.749	1.750	1.750		
C	3.495	3.505		3.500	3.499	3.500	3.500		
D	1.745	1.755		1.750	1.749	1.750	1.750		
E	7.990	8.010		8.000	7.997	8.000	8.000		
F	0.490	0.510		0.500	0.499	0.504	0.502		
G	0.257	0.262	DT8683	0.258	0.258	0.258	0.258		
H	0.375	0.380	DT8684	0.376	0.377	0.376	0.376		
I	0.490	0.510		0.500	0.501	0.502	0.502		
J	1.174	1.184		1.179	1.178	1.178	1.179		
K	0.558	0.578		0.578	0.567	0.566	0.569		
L	1.174	1.184		1.179	1.178	1.178	1.179		
M	1.365	1.375		1.370	1.368	1.369	1.369		
N	2.495	2.505		2.500	2.500	2.500	2.499		
O	4.119	4.129		4.124	4.121	4.121	4.121		
P	0.115	0.135		0.126	0.127	0.127	0.127		
Q	0.115	0.135		0.135	0.135	0.135	0.135		
R	0.240	0.260		0.250	0.252	0.257	0.252		
S	0.115	0.135		0.130	0.130	0.131	0.129		
T	0.178	0.198		0.188	0.188	0.188	0.188		
U	3.210	3.250		3.230	3.230	3.230	3.230		
V	0.230	0.250		0.242	0.240	0.240	0.240		
W	0.115	0.135		0.124	0.131	0.132	0.126		
X	0.308	0.313		0.311	0.316	0.311	0.311		
Y	0.760	0.765		0.760	0.760	0.760	0.760		
Z	0.352	0.372		0.365	0.364	0.364	0.365		
AA	0.470	0.530		0.500	0.500	0.500	0.500		
AB	0.615	0.635		0.627	0.630	0.631	0.630		
AC	0.053	0.073		0.063	0.063	0.063	0.063		
AD	0.240	0.260		0.251	0.247	0.245	0.246		
AE	1.500	1.520		1.511	1.508	1.513	1.512		
AF	0.115	0.135		0.135	0.125	0.125	0.125		
AG	0.240	0.280		0.260	0.265	0.267	0.262		
AH	0.240	0.260		0.251	0.250	0.249	0.249		
AI	2.000	2.020		2.000	2.002	2.003	2.003		
AJ	0.023	0.043		0.030	0.030	0.030	0.030		
Accept/Reject									

Measured by:	SD 19ml
Date:	06/12/06

Audited by:	En
Date:	06/12/05

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.26	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	

<b>DART AEROSPACE LTD</b>	<b>Work Order:</b>	<b>29512</b>
<b>Description: Saddle, Aft Outboard</b>	<b>Part Number:</b>	<b>D2573</b>
<b>Inspection Dwg: D2573 Rev. E</b>		<b>Page 1 of 1</b>

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Dim	Min	Max	Go/No Go Gauge	1	2	3	4		
A	0.438	0.443	DT8682	.440	.440	.440	.440		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.001	8.000	8.001	8.000		
F	0.490	0.510		.500	.499	.500	.496		
G	0.257	0.262	DT8683	.258	.258	.258	.258		
H	0.375	0.380	DT8684	.376	.376	.376	.376		
I	0.490	0.510		.500	.503	.501	.503		
J	1.174	1.184		1.179	1.178	1.179	1.179		
K	0.558	0.578		.568	.569	.567	.568		
L	1.174	1.184		1.179	1.175	1.179	1.179		
M	1.365	1.375		1.370	1.370	1.370	1.370		
N	2.495	2.505		2.500	2.500	2.500	2.500		
O	4.119	4.129		4.124	4.124	4.124	4.124		
P	0.115	0.135		.126	.126	.127	.126		
Q	0.115	0.135		.135	.135	.135	.135		
R	0.240	0.260		.250	.250	.250	.250		
S	0.115	0.135		.127	.126	.128	.130		
T	0.178	0.198		.188	.188	.188	.188		
U	3.210	3.250		3.230	3.230	3.230	3.230		
V	0.230	0.250		.240	.240	.240	.240		
W	0.115	0.135		.130	.131	.131	.131		
X	0.308	0.313		.311	.311	.311	.311		
Y	0.760	0.765		.763	.763	.763	.763		
Z	0.352	0.372		.362	.361	.363	.363		
AA	0.470	0.530		.500	.500	.500	.500		
AB	0.615	0.635		.630	.631	.630	.625		
AC	0.053	0.073		.063	.063	.063	.063		
AD	0.240	0.260		.250	.250	.249	.248		
AE	1.500	1.520		1.513	1.513	1.513	1.513		
AF	0.115	0.135		.135	.135	.135	.135		
AG	0.240	0.280		.260	.260	.260	.260		
AH	0.240	0.260		.249	.248	.248	.248		
AI	2.000	2.020		2.002	2.003	2.003	2.002		
AJ	0.023	0.043		.030	.030	.030	.030		
Accept/Reject									

Measured by:	<i>gnd / SD</i>
Date:	06.12.07

Audited by:	<i>Er</i>
Date:	06/12/15

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.26	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	<i>gnd</i>

<b>DART AEROSPACE LTD</b>	<b>Work Order:</b> 29512
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<b>Inspection Dwg:</b> D2573 Rev. E	<b>Page 1 of 1</b>

Inspect dimensions highlighted on inspection sheet drawing D2573 Rev. E and record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	By	Date
A	0.438	0.443	DT8682	0.440	0.440	0.440	0.440		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.000	8.000	7.999	8.000		
F	0.490	0.510		0.500	0.505	0.502	0.502		
G	0.257	0.262	DT8683	0.258	0.258	0.258	0.258		
H	0.375	0.380	DT8684	0.376	0.376	0.377	0.377		
I	0.490	0.510		0.503	0.501	0.502	0.501		
J	1.174	1.184		1.179	1.179	1.179	1.179		
K	0.558	0.578		0.568	0.568	0.567	0.567		
L	1.174	1.184		1.179	1.179	1.179	1.179		
M	1.365	1.375		1.370	1.370	1.370	1.370		
N	2.495	2.505		2.500	2.500	2.500	2.500		
O	4.119	4.129		4.124	4.124	4.122	4.120		
P	0.115	0.135		0.126	0.127	0.127	0.126		
Q	0.115	0.135		0.135	0.135	0.135	0.135		
R	0.240	0.260		0.250	0.257	0.257	0.257		
S	0.115	0.135		0.129	0.129	0.130	0.130		
T	0.178	0.198		0.188	0.188	0.188	0.188		
U	3.210	3.250		3.230	3.230	3.230	3.230		
V	0.230	0.250		0.240	0.270	0.241	0.241		
W	0.115	0.135		0.127	0.129	0.132	0.131		
X	0.308	0.313		0.311	0.311	0.311	0.310		
Y	0.760	0.765		0.763	0.767	0.761	0.761		
Z	0.352	0.372		0.364	0.364	0.365	0.365		
AA	0.470	0.530		0.500	0.500	0.500	0.500		
AB	0.615	0.635		0.626	0.627	0.628	0.632		
AC	0.053	0.073		0.063	0.063	0.063	0.063		
AD	0.240	0.260		0.248	0.249	0.246	0.246		
AE	1.500	1.520		1.513	1.515	1.512	1.512		
AF	0.115	0.135		0.135	0.135	0.126	0.125		
AG	0.240	0.280		0.260	0.260	0.260	0.260		
AH	0.240	0.260		0.248	0.248	0.250	0.251		
AI	2.000	2.020		2.002	2.007	2.002	2.0015		
AJ	0.023	0.043		0.030	0.030	0.030	0.030		
Accept/Reject									

Measured by: SA	Audited by: En
Date: 06.12.08 / 06.12.11	Date: 06.12.15

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.26	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	

<b>DART AEROSPACE LTD</b>	<b>Work Order:</b>	29512
<b>Description:</b> Saddle, Aft Outboard	<b>Part Number:</b>	D2573
<b>Inspection Dwg:</b> D2573 Rev. E		Page 1 of 1

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B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.000	8.000	8.000	8.000		
F	0.490	0.510		0.502	0.502	0.502	0.502		
G	0.257	0.262	DT8683	0.258	0.258	0.258	0.258		
H	0.375	0.380	DT8684	0.376	0.376	0.376	0.376		
I	0.490	0.510		0.502	0.502	0.501	0.500		
J	1.174	1.184		1.179	1.179	1.178	1.178		
K	0.558	0.578		0.568	0.568	0.568	0.567		
L	1.174	1.184		1.179	1.179	1.178	1.178		
M	1.365	1.375		1.370	1.370	1.370	1.370		
N	2.495	2.505		2.500	2.500	2.500	2.500		
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Q	0.115	0.135		0.135	0.135	0.135	0.135		
R	0.240	0.260		0.251	0.251	0.251	0.251		
S	0.115	0.135		0.129	0.130	0.129	0.130		
T	0.178	0.198		0.188	0.188	0.188	0.188		
U	3.210	3.250		3.230	3.230	3.230	3.230		
V	0.230	0.250		0.240	0.240	0.241	0.241		
W	0.115	0.135		0.132	0.131	0.133	0.133		
X	0.308	0.313		0.310	0.310	0.311	0.311		
Y	0.760	0.765		0.761	0.761	0.761	0.761		
Z	0.352	0.372		0.365	0.364	0.364	0.364		
AA	0.470	0.530		0.500	0.500	0.500	0.500		
AB	0.615	0.635		0.632	0.630	0.630	0.630		
AC	0.053	0.073		0.063	0.063	0.063	0.063		
AD	0.240	0.260		0.247	0.247	0.248	0.247		
AE	1.500	1.520		1.512	1.513	1.512	1.511		
AF	0.115	0.135		0.125	0.125	0.125	0.125		
AG	0.240	0.280		0.268	0.270	0.265	0.268		
AH	0.240	0.260		0.250	0.249	0.250	0.250		
AI	2.000	2.020		2.002	2.002	2.001	2.002		
AJ	0.023	0.043		0.033	0.033	0.033	0.033		
Accept/Reject									

Measured by:	me
Date:	06/12/11

Audited by:	Ep
Date:	06/12/11

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.26	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	





05.12.06

MATERIAL: 7075-T7351 (QQ-A-250/12)  
(REF DART SPEC. D6102-001)  
FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1  
POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER  
DART QSI 005 4.3  
BREAK ALL SHARP EDGES 0.010 TO 0.020  
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

- 1 ENGRAVE PART AND BATCH NUMBER IN THIS AREA TO MAX DEPTH OF 0.010
- 2 ENGRAVE DART LOGO TO MAX DEPTH OF 0.015 WITH MIN RAD 0.125
- 3 CHAMFER 0.063" x 45° AROUND THIS SURFACE (TYPICAL 2 PLACES)
- 4 CHAMFER 0.063" x 45° ALL AROUND
- 5 CHAMFER 0.033" x 45° (SEE DETAIL C)

00

0.00

VIEW B-B

1.73

0.20

2

R0.66 (TYP)

R0.50 (TYP)

DART

1.750 ± 0.005


3.500 ± 0.005

1.750 ± 0.005

8.000

E	05.07.13	ADD CHAMFER ON RIDGE NOTE 5
D	02.09.06	ADD RIDGES; TIGHTEN TOLERANCES
C	99.10.22	INCRP. DEO 9123/9079/9102 ADD DIMENSIONS PER TSR A1177
B	96.12.02	ADD GROUND DIR., 0.438 WAS 0.425
A	96.09.16	NEW ISSUE

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DART AEROSPACE LTD.

DESIGN	DRAWN BY:	NEW MODEL	
DS	PH	<b>DART</b>	DART AEROSPACE LTD. HAMMERSLEY, ONTARIO, CANADA
CHECKED 	APPROVED 	DRAWING NO. D2573	REV. _____ SHEET 1 OF _____
DATE 05.07.13	TITLE OUTER AFT SADDLE		SCALE 2:1

Technical drawing of a mechanical part, likely a flange or base plate, showing dimensions and features. The drawing includes a top view with a central vertical slot and two side slots. Dimensions are given in inches with tolerances. Key features include:

- R0.57 (TYP) top outer radius
- 1.370±0.005 horizontal dimensions
- 4.000 total width
- 4.124±0.005 distance from center to side slot
- 0.125 RIDGE
- 0.568 vertical dimension
- 1.179±0.005 vertical dimensions
- 0.750 (TYP) side slot width
- 0.375±0.005 (TYP 2 PLACES) hole diameter
- 0.500 vertical dimension
- 0.750 (TYP) hole diameter
- 0.510 MIN FLAT AROUND ALL HOLES
- 0.38 (TYP) bottom outer radius
- 0.125 RIDGE
- 0.50 (TYP) bottom outer radius
- 0.25±0.003 RIDGE
- GRAIN DIRECTION indicated by an arrow
- A section line A-A is shown
- A detail view B is indicated by an arrow pointing to the bottom right corner
- The word "DART" is visible on the bottom edge

## SECTION A-A

Technical drawing of a mechanical part, likely a valve or fitting, showing a cross-section with various dimensions and radii. The part has a flange on the left and a threaded section on the right. Dimensions include radii (R0.50, R0.188, R1.510), flat areas (0.240), and various thicknesses (0.125, 0.250, 0.063). A total length dimension of 3.230 ± 0.020 is shown at the top.

DETAIL C

DETAIL C  
SCALE 4:3

DETAIL C  
SCALE 4:3

SHOP COPY  
RETURN TO  
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WORK ORDER  
NO. 29512